

25  
65. A cathode material according to Claim 24, wherein  
ex is greater than 0.--

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-22, 24, 26-59, and 61-65 are pending in the application. The independent claims are Claims 1, 6, 16, 19, 24, 50, 57, 59, 61, and 62.

Applicants previously elected Claims 23, 25-49, and 60, and the remaining claims have been withdrawn from further consideration.

Applicants have canceled Claims 23 and 25 and 60, and replaced them with new claims 62-65. The new claims are directed to the elected invention, are fully supported in the specification and drawings, and are believed to be allowable for the reasons to be developed below. Claim 62 is the only independent claim of the elected group of claims.

For the Examiner's convenience, support for the definition of "M" may be found at page 4, lines 1-4 of the specification. Support for the definition of "y" may be found at page 21, lines 1-3 of the specification. With respect to the definition of "M", it is merely a combination

of the definitions of the terms D, T, Q, and R (including corresponding oxidation states), as found at page 20, lines 7-14 of the specification. Support for the definition of "X" is also found at page 20 of the specification. Finally, the definition of "x" remains unchanged in the new claims. The variable "x" has the same definition in Claim 27 and Claim 62. Accordingly, no amendment is believed to be necessary to Claim 27 in that respect. However, "x" has been replaced with "a" in Claim 29 and "n" in Claims 33 and 34 to avoid any ambiguity. Furthermore, Claim 26 has been restricted to a combination of cations according to those provided for in Claims 62 for the definition of M. Finally, both Claims 27 and 28 have been rendered dependent on Claim 62.


The claims have been canceled or amended to overcome the objection and formal rejections set forth at pages 2-6 of the Office Action. The Examiner is respectfully requested to telephone the undersigned if she has any additional questions or suggestions regarding claim language.

Claims 23, 25, 28, 30, and 31 were rejected as being unpatentable over Shackle for the reasons detailed at pages 7-8 of the Office Action. Applicants respectfully traverse all our rejections.

X

Shackle relates to a metal ion intercalation compound of formula  $M_xT_yA_z$ . M is defined as an alkali metal such as lithium or sodium. T is defined as a metal ion such as Mn, Ni, V, Ti, Co, Cu, Cr, Sn, Pb, W, and Mo.  $A_z$  is defined as a multi-element anion such as  $SiO_4$ ,  $TiO_4$ , or  $MnO_4$ . There are, therefore, three different elements in the compound of Shackle. Applicants respectfully submit that, Shackle does not mention, suggest, or imply that the compound of the formula  $M_xT_yA_z$  is or could be an ordered or modified olivine structure, as is the case in the cathode material now recited in Claim 62. Moreover, it should also be noted that in Shackle, the alkali metal (i.e. lithium or sodium) is mandatory. In contrast, in the present invention, the presence of lithium is only optional.

On the other hand, in the cathode material of the present invention, the relevant compound is of the ordered or modified olivine structure, and comprises four elements: lithium, cation M, cation M', and an anion of formula  $(XO_4)$ . Claim 62 is specifically drafted to prevent M and M' from being the same metal cation. It is therefore clear that the compound of the present invention is patently distinct over Shackle, which, as stated above, does not disclose or suggest

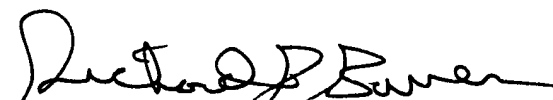


that his compound comprises an ordered or modified olivine structure.

In view of the above amendments and remarks, it is believed that this application is now in condition for allowance and a Notice thereof is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
Attorney for Applicant

Registration No. 31,588

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Telephone: (212) 218-2100  
Facsimile: (212) 218-2200

X